IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE THE APPLICATION OF)
Lawrence J. Terzo	Examiner: Elizabeth D. Wood
SERIAL NO. 10/774,302) Art Unit: 1755
FILED: February 6, 2004) Docket No. 36194-95262
FOR: Concrete Admixture and Use in Low Temperatures) Customer No. 23644)

REPLY BRIEF IN RESPONSE TO EXAMINER'S ANSWER

Commissioner of Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

This is a reply to the Examiner's Answer, dated August 8, 2007, to the Appeal Brief filed on May 4, 2007.

I. A Prima Facie Case of Obviousness Is Not Established.

Appellant maintains his position that no *prima facie* case of obviousness is established. No *prima facie* case of obvious has been established because, as stated above, the nitrite based corrosion inhibitor and nonchloride type accelerator, in combination, do not behave as expected by one of skill in the art. More is required than merely pointing to the laundry list of other ingredients added to concrete that is disclosed in Anderson et al. to show that Appellant's combination of a nitrite based corrosion inhibitor and a nonchloride type accelerator would have been obvious. "[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 1741 (2007). After reciting the *Graham* factors for obviousness (Answer at 3), the Examiner merely concludes that the rejected claims are obvious. In making an obviousness determination,

the analysis of the Graham factors must be explicit. *KSR*, 127 S.Ct. at 1741. The Examiner failed to include any analysis of the level of skill in the art, and provided only a cursory mention of the other factors. Thus, no *prima facie* case of obviousness has been established.

In section 10 of the Examiner's Answer, regarding the response to Appellant's arguments, the Examiner states that Anderson et al. suggests the addition of a nitrite based corrosion inhibitor and a nonchloride type accelerator for their known and disclosed function. The Examiner fails to appreciate that Appellant is claiming a method and an admixture comprising a nitrite based corrosion inhibitor and a nonchloride type accelerator, not for their generally known functions, but for their ability, in combination, to reduce the set time of concrete at low temperatures. Unlike Applicant's admixture, which has been found to reduce set time down to zero degrees Fahrenheit, Anderson et al. does not disclose low temperature applications, and in fact provides no examples below 50 degrees Fahrenheit. Therefore, Applicant's results are indeed unexpected, and not what would be expected by one of ordinary skill in the art.

The Examiner also contends that Anderson et al. "clearly indicates to the skilled artisan a reasonable expectation that curing will be accelerated by the addition of either or both of the compounds." (Answer at 5). Anderson et al. does not disclose the compounds used low temperatures. The lower the ambient temperature, the longer the amount of time required for concrete to set, even with the addition of accelerators, which become less effective at lower temperatures. Therefore, one skilled in the art would not have expected Appellant's results if the nitrite based corrosion inhibitor and nonchloride type accelerator behaved in combination as they do independently.

The Examiner inappropriately invokes "inherency" to argue that Anderson et al. teaches a composition that makes the present method claims obvious because the method of use—to set

concrete more rapidly at low temperatures—is inherent in Anderson et al. Inherency may not be established by probabilities or possibilities. In re Robertson, 169 F.3d 743, 745 (Fed Cir. 1999). The mere fact that a certain thing may result from a given set of circumstances is not sufficient. Id. An inherent limitation is one that is necessarily present; invalidation based on inherency is not established by "probabilities or possibilities." Scaltech, Inc. v. Retec/Tetra, LLC., 178 F.3d 1378, 1384 (Fed. Cir. 1999). If the prior art limitation is inherently disclosed . . . it must be necessarily present and a person of ordinary skill in the art would recognize its presence. Crown Operations Intl., Ltd. v. Solutia Inc., 289 F.3d 1367, 1377 (Fed. Cir. 2002). When a rejection is based on inherency of limitations not expressly disclosed in the reference, it must be shown the undisclosed information was known to be present in the subject matter of the reference. See Continental Can Co. USA, Inc. v. Monsanto Co., 948 F.2d 1264, 1269 (Fed. Cir. 1991). Inherency cannot be based on the knowledge of the inventor; facts asserted to be inherent in the prior art must be shown by evidence from the prior art. In re Debizak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). The Examiner has not provided any evidence from the prior art required to invoke inherency.

II. The Term "Effective" Is Not Indefinte

Appellant submits that there "is nothing inherently wrong with defining some part of an invention in functional terms." MPEP § 2173.05(g). It is clear that Appellant's use of the term "effective" means that the claimed admixture reduces concrete set time, and therefore is not indefinite.

Reversal of the Examiner's rejections is respectfully requested.

Date: October 5, 2007

Respectfully submitted,

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